OIPE

RAW SEQUENCE LISTING

DATE: 12/06/2000 PATENT APPLICATION: US/09/717,641 TIME: 15:13:14

Input Set : A:\P0645P4D2C3.txt

Output Set: N:\CRF3\12062000\1717641.raw

SEQUENCE LISTING

ENTERED

```
W--> 3 SEQUENCE LISTING
      5 (1) GENERAL INFORMATION:
              (i) APPLICANT: Garrard, Lisa J.
      8
                             Henner, Dennis J.
      q
                             Bass, Steven
     1.0
                             Greene, Ronald
                             Lowman, Henry B.
     12
                             Wells, James A.
     13
                             Matthews, David J.
     15
            (ii) TITLE OF INVENTION: ENRICHMENT METHOD FOR VARIANT PROTEINS WITH
     16
                                      ALTERED BINDING PROPERTIES
           (iii) NUMBER OF SEQUENCES: 43
     20
            (iv) CORRESPONDENCE ADDRESS:
     21
                   (A) ADDRESSEE: Genentech, Inc.
     22
                   (B) STREET: 1 DNA Way
                  (C) CITY: South San Francisco
     23
                  (D) STATE: California
     24
                  (E) COUNTRY: USA
     26
                  (F) ZIP: 94080
     28
             (V) COMPUTER READABLE FORM:
                  (A) MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
     29
     30
                  (B) COMPUTER: IBM PC compatible
     31
                  (C) OPERATING SYSTEM: PC-DOS/MS-DOS
     32
                  (D) SOFTWARE: WinPatin (Genented)
     34
           (vi) CURRENT APPLICATION DATA:
C--> 35
                  (A) APPLICATION NUMBER: US/09/717,641
C--> 36
                  (B) FILING DATE: 21-Nov-2000
     37
                  (C) CLASSIFICATION:
     67
           (vii) PRIOR APPLICATION DATA:
     40
                  (A) APPLICATION NUMBER: 08/922345
     41
                  (B) FILING DATE: 03-SEP-1997
     44
                  (A) APPLICATION NUMBER: 08/463587
     45
                  (B) FILING DATE: 05-JUN-1995
     48
                  (A) APPLICATION NUMBER: 08/050058
                  (B) FILING DATE: 30-APR-1993
                  (A) APPLICATION NUMBER: PCT/US91/09133
    53
                  (B) FILING DATE: 03-DEC-1991
    56
                  (A) APPLICATION NUMBER: 07/743614
    57
                  (B) FILING DATE: 09-AUG-1991
    60
                  (A) APPLICATION NUMBER: 07/715300
                  (B) FILING DATE: 14-JUN-1991
    64
                  (A) APPLICATION NUMBER: 07/683400
    65
                  (B) FILING DATE: 10-APR-1991
    68
                  (A) APPLICATION NUMBER: 07/621667
    69
                  (B) FILING DATE: 03-DEC-1990
         (viii) ATTORNEY/AGENT INFORMATION:
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PATENT APPLICATION: US/09/717,641
                                                           TIME: 15:13:14
                  Input Set : A:\P0645P4D2C3.txt
                  Output Set: N:\CRF3\12062000\1717641.raw
               (A) NAME: Schwartz, Timothy R.
 73
               (B) REGISTRATION NUMBER: 32171
 74
               (C) REFERENCE/DOCKET NUMBER: P0645P4D2C3
 76
         (ix) TELECOMMUNICATION INFORMATION:
 77
              (A) TELEPHONE: 650/225-7467
              (B) TELEFAX: 650/952-9881
 79
    (2) INFORMATION FOR SEQ ID NO: 1:
 18
         (i) SEQUENCE CHARACTERISTICS:
 82
               (A) LENGTH: 36 base pairs
              (B) TYPE: Nucleic Acid
 83
 84
              (C) STRANDEDNESS: Single
 85
              (D) TOPOLOGY: Linear
 87
        (xi) SEQUENCE DESCRIPTION: SEQ LD NO: 1:
    GGCAGCIGIG GCTTCTAGAG TGGCGGCGGC TCTGGT 36
 90
 92
    (2) INFORMATION FOR SEQ ID NO: 2:
         (i) SEQUENCE C ARACTERISTICS:
 94
 95
              (A) LENGTH: 36 base pairs
 96
              (B) TYPE: Nucleic Acid
 97
              (C) STRANDEDNESS: Single
 98
              (D) TOPOLOGY: Linear
 100
         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
     AGCTGTGGCT TCGGGCCCTT AGCATTTAAT GCGGTA 36
 103
 105 (2) INFORMATION FOR SEQ ID NO: 3:
107
          (i) SEQUENCE CHARACTERISTICS:
108
               (A) LENGTH: 33 base pairs
1.09
               (B) TYPE: Nucleic Acid
               (C) STRANDEDNESS: Single
1.1.0
11.1
               (D) TOPOLOGY: Linear
1.13
         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
116 TTCACAAACG AAGGGCCCCT AATTAAAGCC AGA 33
118 (2) INFORMATION FOR SEQ TD NO: 4:
120
         (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 30 base pairs
121
122
               (B) TYPE: Nucleic Acid
123
               (C) STRANDEDNESS: Single
124
               (D) TOPOLOGY: Linear
126
        (X1) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
    CAATAATAAC GGGCTAGCCA AAAGAACTGG 30
129
131 (2) INFORMATION FOR SEQ ID NO: 5:
         (i) SEQUENCE CHARACTERISTICS:
134
              (A) LENGTH: 24 base pairs
135
               (B) TYPE: Nucleic Acid
136
              (C) STRANDEDNESS: Single
1.37
              (D) TOPOLOGY: Linear
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
142
    CACGACAGAA TTCCCGACTG GAAA 24
144 (2) INFORMATION FOR SEQ ID NO: 6:
1.46
         (i) SEQUENCE CHARACTERISTICS:
```

(Λ) LENGTH: 23 base pairs

RAW SEQUENCE LISTING

DATE: 12/06/2000

147

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Input Set : A:\P0645P4D2C3.txt
                 Output Set: N:\CRF3\12062000\1717641.raw
               (B) TYPE: Nucleic Acid
 148
 149
               (C) STRANDUDNESS: Single
 150
               (D) TOPOLOGY: Linear
 152
         (xi) SEQUENCE DESCRIPTION: SEQ 1D NO: 6:
 155
      CTGTTTCTAG ACTGAAATTG FTA 23
 157
     (2) INFORMATION FOR SEQ ID NO: 7:
          (i) SEQUENCE CHARACTERISTICS:
 159
 160
               (A) LENGTH: 21 base pairs
 161
               (B) TYPE: Nucleic Acid
 162
               (C) STRANDEDNESS: Single
 163
               (D) TOPOLOGY: Linear
         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
 165
     ACATTCCTGG GTACCGTGCA G 21
 1.70
     (2) INFORMATION FOR SEQ TD NO: 8:
172
          (i) SEQUENCE CHARACTERISTICS:
               (A) LENGTH: 63 base pairs
173
174
               (B) TYPE: Nucleic Acid
175
               (C) STRANDEDNESS: Single
1.76
               (D) TOPOLOGY: Linear
178
         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
181
     GCTTCAGGAA GGACATGGAC NNSGTCNNSA CANNSCTGNN SATCGTGCAG 50
183
     TGCCGCTCTG TGG 63
185 (2) INFORMATION FOR SEQ ID NO: 9:
187
         (i) SEQUENCE CHARACTERISTICS:
188
               (A) LENGTH: 24 base pairs
189
               (B) TYPE: Nucleic Acid
               (C) STRANDEDNESS: Single
190
191
              (D) TOPOLOGY: Linear
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
193
    AAGGTCTCCA CATACCTGAG GATC 24
198 (2) INFORMATION FOR SEQ ID NO: 10:
200
         (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 33 base pairs
201
              (B) TYPE: Nucleic Acid
202
203
              (C) STRANDEDNESS: Single
204
              (D) TOPOLOGY: Linear
206
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
    ATGGACAAGC TGTCGACATA CCTGCGCATC GTG 33
209
211 (2) INFORMATION FOR SEQ TD NO: 11:
213
         (i) SEQUENCE CHARACTERISTICS:
2.14
              (A) LENGTH: 36 base pairs
215
              (B) TYPE: Nucleic Acid
216
              (C) STRANDEDNESS: Single
217
              (D) TOPOLOGY: Linear
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
219
    GGCAGCTGTG GATTCTAC\G TGGCGGTGGC TCTGGT 36
222
224 (2) INFORMATION FOR SEQ ID NO: 12:
226
         (i) SEQUENCE CHARACTERISTICS:
227
              (A) LENGTH: 12 amino acids
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/717,641

DATE: 12/06/2000

TIME: 15:13:14

PATENT APPLICATION: US/09/717,641 TIME: 15:13:14 Input Set : A:\P0645P4D2C3.txt Output Set: N:\CRF3\12062000\T717641.raw 228 (B) TYPE: Amino Acid 229 (D) TOPOLOGY: Linear 231 (xi) SEQUENCE DESCRIPTION: SEQ 1D NO: 12: 233 Gly Ser Cys Gly Phe Glu Ser Gly Gly Gly Ser Gly 234 5 236 (2) INFORMATION FOR SEQ 1D NO: 13: (i) SEQUENCE CHARACTERISTICS: 238 (A) LENGTH: 27 base pairs 240 (B) TYPE: Nucleic Acid 241 (C) STRANDEDNESS: Single 242 (D) TOPOLOGY: Linear (xi) SEQUENCE DESCRIPTION: SEQ 1D NO: 13: 244 CGGACTGGGC AGATATICAA GCAGACC 27 249 (2) INFORMATION FOR SEQ ID NO: 14: 251 (i) SEQUENCE CHARACTERISTICS: . (A) LENGTH: 38 base pairs 252 253 (B) TYPE: Nucleic Acid 254 (C) STRANDEDNESS: Single 255 (D) TOPOLOGY: Linear 257 (Xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: 260 CTCAAGAACT ACGGGTTACC CTGACTGCTT CAGGAAGG 38 262 (2) INFORMATION FOR SEQ ID NO: 15: (i) SEQUENCE CHARACTERISTICS: 265 (A) LENGTH: 30 base pairs 266 (B) TYPE: Nucleic Acid 267 (C) STRANDEDNESS: Single 268 (D) TOPOLOGY: Linear 270 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15: CGCATCGIGC AGTGCAGAIC TGTGGAGGGC 30 273 275 (2) INFORMATION FOR SEQ ID NO: 16: 277 (i) SEQUENCE CHARACTERISTICS: 278 (A) LENGTH: 66 base pairs 279 (B) TYPE: Nucleic Acid 280 (C) STRANDEDNESS: Single 281 (D) TOPOLOGY: Linear 283 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16: 286 GTTACTCTAC TGCTTTCAGG AAGGACATGG ACNNSGTCNN SACANNSCTG 50 288 NNSATCGTGC AGTGCA 66 290 (2) INFORMATION FOR SEQ ID NO: 17: 292 (i) SEQUENCE CHARACTERISTICS: 293 (A) LENGTH: 64 base pairs 294 (B) TYPE: Nucleic Acid 295 (C) STRANDEDNESS: Single 296 (D) TOPOLOGY: Linear 298 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:

GATCTGCACT GCACGATSNN CAGSNNTGTS NNGACSNNGT CCATGTCCTT 50

RAW SEQUENCE LISTING

DATE: 12/06/2000

301

307

CCTGAAGCAG TAGA 64

305 (2) INFORMATION FOR SEQ JD NO: 18:

(i) SEQUENCE CHARACTERISTICS:

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PATENT APPLICATION: US/09/717,641
                                                           TIME: 15:13:14
                  Input Set : A:\P0645P4D2C3.txt
                  Output Set: N:\CRF3\12062000\I717641.raw
                (A) LENGTH: 25 base pairs
 308
 309
                (B) TYPE: Nucleic Acid
 310
                (C) SIRANDEDNESS: Single
 3.11
                (D) TOPOLOGY: Linear
 313
         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
 3.16
     GCCITTGACA GGTACCAGGA GTTIG 25
 318 (2) INFORMATION FOR SEQ 1D NO: 19:
          (i) SEQUENCE CHARACTERISTICS:
 321
               (A) LENGTH: 33 base pairs
 322
               (B) TYPE: Nucleic Acid
 323
               (C) STRANDEDNESS: Single
 324
               (D) TOPOLOGY: Linear
 326
         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
 329
      CCAACTATAC CACTCTCGAG GTCTAITCGA TAA 33
 331 (2) INFORMATION FOR SEO ID NO: 20:
 333
          (i) SEQUENCE CHARACTERISTICS:
 334
               (A) LENGTH: 66 base pairs
 335
               (B) TYPE: Nucleic Acid
 336
               (C) STRANDEDNESS: Single
 337
               (D) TOPOLOGY: Linear
 339
         (xi) SEQUENCE DESCRIPTION: SEQ 1D NO: 20:
     TCGAGGCICN NSGACAACGC GNNSCIGCGT GCTNNSCGTC TTNNSCAGCT 50
 342
 344
     GGCCTTTGAC ACGTAC 66
 346 (2) INFORMATION FOR SEO ID NO: 21:
 348
          (i) SEQUENCE CHARACTERISTICS:
 349
               (A) LENGTH: 58 base pairs
 350
               (B) TYPE: Nucleic Acid
351
               (C) STRANDEDNESS: Single
 352
               (D) TOPOLOGY: Linear
354
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:
 357
     GTGTCAAAGG CCAGCTGSNN AAGACGSNNA GCACGCAGSN NCGCGTTGTC 50
359
    SNNGAGCC 58
361 (2) INFORMATION FOR SEQ ID NO: 22:
363
         (i) SEQUENCE CHARACTERISTICS:
364
              (A) LENCTH: 65 base pairs
365
              (B) TYPE: Nucleic Acid
366
              (C) STRANDEDNESS: Single
367
              (D) TOPOLOGY: Linear
369
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:
372 GTTACTCTAC TGCTTCNNSA AGGACATGNN SAAGGTCAGC NNSTACCTGC 50
     GCNNSGTCCA GIGCA 65
376 (2) INFORMATION FOR SEQ ID NO: 23:
378
         (i) SEQUENCE CHARACTERISTICS:
379
              (A) LENGTH: 64 base pairs
380
              (B) TYPE: Nucleic Acid
381
              (C) STRANDEDNESS: Single
              (D) TOPOLOGY: Linear
384
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:
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GATCTGCACT GCACSNNGCG CAGGTASNNG CTGACCTTSN NCATGTCCTT 50

RAW SEQUENCE LISTING

DAIE: 12/06/2000

VERIFICATION SUMMARY

1. 1. 1.

PATENT APPLICATION: US/09/717,641

DAIE: 12/06/2000 FIME: 15:13:15

Input Set : A:\P0645P4D2C3.txt
Output Set: N:\CRF3\12062000\1717641.raw

L:3 M:244 W: Invalid beginning of sequence listing, Data=[SEQUENCE LISTING], Duplicate Sequence Listing Title: L:35 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:] L:36 M:220 C: Keyword misspelled or invalid format, [(B) PILING DATE:]